

FIG. 1a

<i>M. bovis</i>	-----ATA-----	TGTTCTTTGAAAAC TGAATAG TAAAAATATTTTT	142
<i>M. primatum</i>	-----TT-----	TGTTCTTTGAAAAC TGAATAG TAAAAATATTTTT	181
<i>M. fortuitum</i>	-----ATT-----	TGTTCTTTGAAAAC TGAATAG TAAA--TTTTT	177
<i>M. goodii</i>	-----TT-----	TGTTCTTTGAAAAC TGAATAG TAAA--TTTTA	159
<i>M. abscessus</i>	-----AT-----	TGTTCTTTGAAAAC TGAATAG TAAA--TTTTT	196
<i>M. goodii</i>	-----AAI-----	TGTTCTTTGAAAAC TGAATAG TAAA--TTTTT	100
<i>M. neurolyticum</i>	TAATAAATGTTTT--	AATATATTCTTTGAAAAC TGAATAG CAAA--TA--T	176
<i>M. pulchrum</i>	-AACAAATA-----	GTTCCTTTGAAAAC TGAATAG CATA--TAAAT	159
<i>M. hyacinthinum</i>	-----ATA-----	GTTCCTTTGAAAAC TGAATAG CAAA--TAA	112
<i>M. abscessus</i>	-----TT-----	TGTTCTTTGAAAAC TGAATAG -----T	115
<i>M. fortuitum</i>	-----TT-----	TGTTCTTTGAAAAC TGAATAG -----T	123
<i>M. oralis</i>	-----II-----	TGTTCTTTGAAAAC TGAATAG -----T	108
<i>M. hyacinthinum</i>	-----TT-----	TGTTCTTTGAAAAC TGAATAG -----T	119
<i>M. salivarium</i>	-----TT-----	TGTTCTTTGAAAAC TGAATAG -----T	115
<i>M. fortuitum</i>	-----TT-----	TGTTCTTTGAAAAC TGAATAG -----T	92
<i>M. fortuitum</i>	-----TT-----	TGTTCTTTGAAAAC TGAATAG -----T	97
<i>M. arginini</i>	-----TT-----	TGTTCTTTGAAAAC TGAATAG -----T	93
<i>M. fortuitum</i>	-----II-----	TGTTCTTTGAAAAC TGAATAG -----T	95
<i>M. genitalium</i>	CCAGTTCTGAAAG--AATGTTTTTGAA	AGTTCTTTGAAAAC TGAATAG -----T	160
<i>M. pneumoniae</i>	CCAGTTCTGAAAG--AACATTTCCGC	TTCTTTGAAAAC TGAATAG -----T	190
<i>M. pirum</i>	TAAATTTTTAAAGTAGTAGAGATGG	TTCTTTGAAAAC TGAATAG -----T	213
<i>M. suis</i>	TT-----	CTTTGAAAAC TGAATAG -----T	106
<i>M. penetrans</i>	TT-----	CTTTGAAAAC TGAATAG -----T	184
<i>M. neurolyticum</i>	TTAAITTAATG--GATGATCGA	CTTTGAAAAC TGAATAG -----T	199

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FIG. 1b

<i>M. arthritis</i>	AAA-----CATCGTATCCAGTTTGGAGAGACTAAACTTCTCTCTTTGTTCTTTGAAAC	108
<i>M. fauclum</i>	AAA-----CATCGTATCCAGTTTGGAGAGACTAAACTTCTCTCTTTGTTCTTTGAAAC	88
<i>M. falconis</i>	TAA-----ATTGCTATCCAGTTTGGAGAGACTA---ACTCTCTTTT---GTTCTTTGAAAC	85
<i>M. hominis</i>	AAAAAAATTGCTATCCAGTTTGGAGAGATTAT---TCTCTCG-----GTTCTTTGAAAC	80
<i>M. arginini</i>	AAA---TATTGCTATCCAGTTTGGAGAGACTA---TCTCTCAATT---GTTCTTTGAAAC	86
<i>M. cloacae</i>	GAATTATTGCTATCCAGTTTGGAGAGACT---TCTCTCAATTGTTCTTTGAAAC	89
<i>M. hyosynoviae</i>	CA-----ATTGCTATCCAGTTTGGAGAGATTAT---TCTCTCTTTT---GTTCTTTGAAAC	113
<i>M. orale</i>	CAA-----ATTGCTATCCAGTTTGGAGAGACTAT---CTCTCATTT---ATTCTTTGAAAC	102
	* * ***** *	
<i>M. arthritis</i>	---TTAAAAAATTAATATTTCAAA-GTTTAGATCAAOCCTATAGAATACAA	173
<i>M. fauclum</i>	---TTAAAAAATTAATATTTCAAA-GTTTAGATCAAOCCTATAGAATACAA	153
<i>M. falconis</i>	ATTA---TTAATTAATATTTCAAA-GTTTAGATCAAOCCTATAGAATACAA	150
<i>M. hominis</i>	---TA---TTAATTAATATTTCAAA-GTTTAGATCAAOC-ATAGAATATTT	141
<i>M. arginini</i>	ATTAAATTTATTAATATTTCAAA-GTTTAGATCAAOCCTATAGAATATAT	153
<i>M. cloacae</i>	---TCAATAAATTAATATTTCAAATGTTTAGATCAAOCCTATAGAATATTC	154
<i>M. hyosynoviae</i>	A-TTATCAAATTAATATTTCAAA-GTTTAGATCAAOCCTATAGAATATTC	178
<i>M. orale</i>	---TTAAAAATATTAATATTCAAAA-ATTTAGATCAAOCCTATAGAATATTC	166
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FIG. 1c

<i>M. bovis</i>	TTATTGATAGISTCAAAAGCTA	ATATCTAGT TTTGAGGAGCA	TTTCTCTCAT	144
<i>M. primatum</i>	TT---TAATAGGGTGGAGCTT	ATATCTAGT TTTGAGGAGCA	TTTCTCTCTT	148
<i>M. fermentans</i>	TTT TT TATGGGTCTAAGCTT	ATATCTAGT TTTGAGGAGCA	ATAT TTT TCTCTCAT	146
<i>M. opalescens</i>	T-----ATGTTCTACAAGCT	ATATCTAGT TTTGAGGAGCA	TTTCTCTCTT	129
<i>M. spermatophilum</i>	TT---TTATGGCTTAAAGTCT	ATATCTAGT TTTGAGGAGCA	TTCTCTCTAAT	186
<i>M. synoviae</i>	GCTTT TTTTGCTTGGGCTAT	GTATTTAGT TTTGAGGAGCAC	CTCTCTTAAAA	143
	* * *	* ** *	**	
<i>M. bovis</i>	ATGTTCTTTGAAAAGCTGAATA	GTAAATATTTTTC	GATATTTACACGACATGAAA	203
<i>M. primatum</i>	TTGTTCTTTGAAAAGCTGAATA	GTAAATATTTTTC	GATATTTACACGACATGCAACTC	207
<i>M. fermentans</i>	TTGTTCTTTGAAAAGCTGAATA	GTAAATATTTTTC	GATATTTACACGACATGAAA	200
<i>M. opalescens</i>	TTGTTCTTTGAAAAGCTGAATA	GTAAATATTTTTC	GATATTTACACGACATGATA	182
<i>M. spermatophilum</i>	TTGTTCTTTGAAAAGCTGAATA	GTAAATATTTTTC	GATATTTACACGACATGTAA	219
<i>M. synoviae</i>	TTGTTCTTTGAAAAGCTGAATA	GTAAATATTTTTC	GATATTTACACGACATGAAAT	193
	*****	*****	* **** *	
<i>M. bovis</i>	ATCAAA---TTAA	GGTTAATTGTTTGGAT	TCATCGASA	250
<i>M. primatum</i>	CCATCAAAAATTTAA	GGTTAATTGTTTGGAT	TCATCGASA	263
<i>M. fermentans</i>	TTAAA---TTAAA	GGTTAATTGTTTGGAT	TCATCGASA	250
<i>M. opalescens</i>	ATTAAATTGATTTA	GGTTAATTGTTTGGAT	TCATCGASATAAAACAATCATAAA	236
<i>M. spermatophilum</i>	TAATTGAA---TTAA	GGTTAATTGTTTGGAT	TCATCGASA	270
<i>M. synoviae</i>	ATAAATTAATTAA	GGTTAATTGTTTGGAT	ACCGAGTT	243
	* * *	* ** *	* **** *	
<i>M. bovis</i>	ATATGATTCATTGAAATGTCCT	AAAATACACATCTAAA	ACTAACACAATAGGA	304
<i>M. primatum</i>	TATGATTCATTGAAATGTCCT	AAAATACACATCTTAA	ACTAAACAAATAGGA	313
<i>M. fermentans</i>	TATGATTCATTGAAATGTCCT	AAAATACACATCATAACA	AACTATAACAATAGGA	306
<i>M. opalescens</i>	TTTATGATTCATTGAAATGTCCT	AAAATACACATCATAATGT	AACCAATACAATAGGA	296
<i>M. spermatophilum</i>	AAATGATTCATTGAAATGTCCT	AAAATACACATCAAAACA	ACAATCTATACAATAGGA	330
<i>M. synoviae</i>	AATAATTTATTAAATGTCCT	TTGAATACA	TATAAC	295
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FIG. 1d

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# muris      CCTCCCTTCTATCGGAGTACA TTTTAGATTATTACACCATATTAGAATATTTTAAATATT  60
# penetrans  CCTCCCTTCTATCGGAGTACA TTAAGCTAAGTAACAAATATTAG-----ATATATT  62
# uraeilyticum CCTCCCTTCT-TCGGAGTAAA TTTTAAAT---TTACGTACTAATAAG-----TGTACATTTT  63
*****  *****  **      *  **      **  **      *  ***

# muris      TGTGTACTTT--TTATAGAAAACCCCCACATCAATAAACCTAA-----ATAAAAAATTTT  115
# penetrans  TGTGTACTTTATTAAAAAAATCCCTAAACTGAAATTTATCTCATGTTATATAAGAGTAAGT  112
# uraeilyticum TATTAAAAATCCATATGAATATAAGCCACTTTTTAAAAATTTT-----TAAAAATTCATAT  109
*  *  *  *  **  *  *      **      *  *  *      **  **      +  +

# muris      TTTGGG-CGGATTCCTATTAGTTTGGAGGATA-TTTCTCTCATGATAGTT-----  165
# penetrans  TCTAGG-CGGATTCCTATTAGTTTGGAGGAT-TTTCTCTCAAGATAGTT-----  162
# uraeilyticum -----GG-CGGATTCCTATTAGTTTGGAGGTTTATTCCTCCCATAAATAATTATT  165
** *****  *  **  ****  **  ***  **

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FIG. 1e

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#. pulmonis      CTACGGAGTACAAAACCATTTTCTTTAGAATTGBCATTTT-----TCYATCAATAGTTAT-   54
# neurolyticum    CTACGGAGTACACATACATCTTATTAAATTTGGTTATTTAAAAATCCTTTTATAATAAAT   60
***** * *** ** *** * **** **      ** * *** * *

#. pulmonis      -AGAAAGTCCTTATGTGTA CTTGCCAATTAGATATCTAGTATTCAGTTTTGAAGTTCT 113
# neurolyticum    AAAAAAGGTTATTATGGG CTTGCCAATAG-----TTTCTATCTAGTTTTGAAGTTT 114
+ ** * ***** * ***** ** * * **** ***** * *

#. pulmonis      A-----TCCTTCAA-----ACAATA-----GTTCTTTAAAAACTGAATAGCATAT 155
# neurolyticum    AATTTTTTCTTTCTAATTAATAAATETTTTAATATATTCCTTTGAAAACTGAATAGCAAAT 174
*          ***** ** * ****                ***** ***** **

#. pulmonis      AAATTAATATGATAACGTCATCAAAATGTAAATTTTIGATCCGAGTCATTTTTTAACAA 215
# neurolyticum    ---ATTGAAATTTTAAITTCATAATATTTCACACAACGCATTACAACACCGAGTCTAACTG 232
*** * ** *** **** * * * ** *      * * * * * ****

#. pulmonis      TTT-GTTAAAAAAT-----AAAATAGATACCTTAG-ATAGACATCAAAAA--ATAAAT 265
# neurolyticum    TTTTATTGACAGTTAGCTTAAATAGATACCTTAGATATAAATCTAAAAAATAGGC 292
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FIG. 1f

M. pneumoniae AACATTTCGGC-----TTCTTTCAAAACTGAAACACAA-TCTTTCTAGTTC----- 205
M. genitalium AATGTTTTTGAAACAGTTCTTTCAAAACTGAAACACAA-TCTTTCTAGTTC----- 175
M. pirum AGTAGAGTGG-----TTCTTTGAAAACTGGAACACAAATCTTTCTAGTTC TTGTGTG 235
 * * ++++++ ++++++ * ** *** ++++++

M. pneumoniae ---AA---TAAATACCAAAGG---ATCAATAC---AATAAGTTACTAAGGGCTTATGCT 252
M. genitalium ---AAAATAAATACCAAAGG---ATCAATAC---AATAAGTTACTAAGGGCTTATGCT 224
M. pirum AATACACAAATATCAAATGCTAATGGATATCAA---AATAAGTTACTAAGGGCTTATGCT 295
 ** ++++++ ++++++ * ** *** ++++++

FIG. 2a

<i>A. axanthum</i> f	AAACAATTCTTCATTTGTTCATCATATTGAGTTTTCGAGACTT-----	88
<i>A. oculi</i> f	AAACAATTCTCTAAATTTGTTCATCATATTGAGTTTTCGAGACTTATGTCA-----	110
<i>A. laidalwii</i> f	TAACATTCTCTAAATTTGTTCATCATATTGAGTTTTCGAGACTTAAATGTCACTCAAAC	108
<i>A. laidalwii</i> f	TAAATATTCTCTAAATTTGTTCATCATATTGAGTTTTCGAGACTT-----	95
<i>A. modicum</i> f	TACAATCAATATACATTTTCATCATATTGAGTTTTCGAGACTTTCCTTC-----	78

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FIG. 2b

<i>A. laidalwii</i> f	CAAGTAACCACTATTATAATAAGTGGGGGCTGTAGCTCAGTTGGTTAGAGGACTGGCT	168
<i>A. oculi</i> f	CAA-----AAGTGGGGGCTGTAGCTCAGTTGGTTAGAGGACACGGCT	168
<i>A. axanthum</i> f	TAG-----TAAAGGGGCTGTAGCTCAGTTGGTTAGAGGACACGGCT	133
<i>A. modicum</i> f	TTA-----TGGGGCTGTAGCTCAGTTGGTTAGAGGACACGGC	122

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<i>A. laidalwii</i> f	TGATAAGCGTGGGGTGGATGGTTCAAGTTCGTTGAGGGCCACCATTAATAAAATATCAATA	227
<i>A. oculi</i> f	TGATAAGCGTGGGGTGGATGGTTCAAGTTCGTTGAGGGCCACCAT-----	201
<i>A. axanthum</i> f	TGATAAGCGTGGGGTGGATGGTTCAAGTTCGTTGAGGGCCACCATTTATAT-----	184
<i>A. modicum</i> f	TGATAAGCGTGGGGTGGATGGTTCAAGTTCGTTGAGGGCCACCATTTATAG-----	172

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FIG. 2c

<i>A. laidalwii</i> f	GTAA---TATTCCTCTAATTTTGTTCATCATATTGAGTTTTCGAAAGACTTAA---AGTAATT--	104
<i>A. oculi</i> f	GCAAGCAATTCCTCTAA---TTTGTTCATCATATTGAGTTTTCGAAAGACTTAA---TCCAAGTG	115
<i>A. axanthum</i> f	---AAACAATTCTCTCA---TTTGTTCATCATATTGAGTTTTCGAAAGACTTTG---ACTTGTTT	98
<i>A. modicum</i> f	-----CATTCATCATATTGAGTTTTCGAAAGACTTTTCTCTCTAATAT	84

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<i>A. laidalwii</i> f	---TAAGTGTTCGAAAGAGTAAAGAAAGTCTTTGAAAGGTAGATAAA---GATGTCTGAAA--	160
<i>A. oculi</i> f	A---TTGGTTCTCTAAGTATCAAAATAAAGTCTTTGAAAGGTAGATAAA---GATGTCTGAAA--	172
<i>A. axanthum</i> f	C---TCAAG---AAGTATCAAAATAAAGTCTTTGAAAGGTAGATAAA---GAAGTCTGAAAT	150
<i>A. modicum</i> f	AAGTAAGATCTTTGAAAGAGTATATAATTTCTGTCTGAA---CAATAAT---ATAAAAGACAA	143

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FIG. 3a

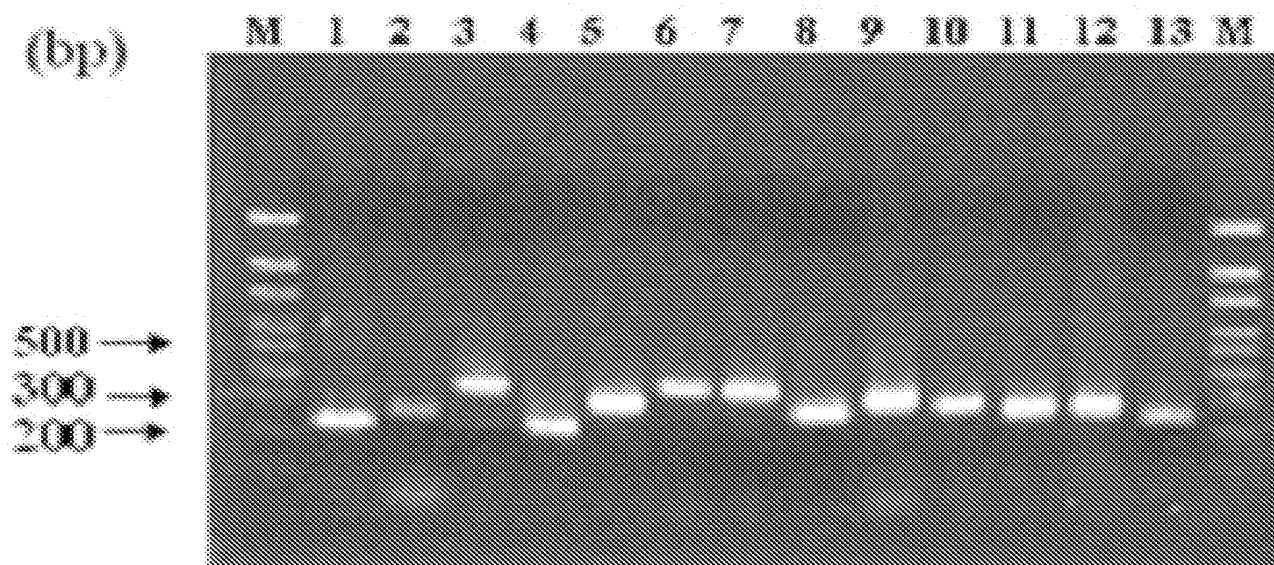


FIG. 3b

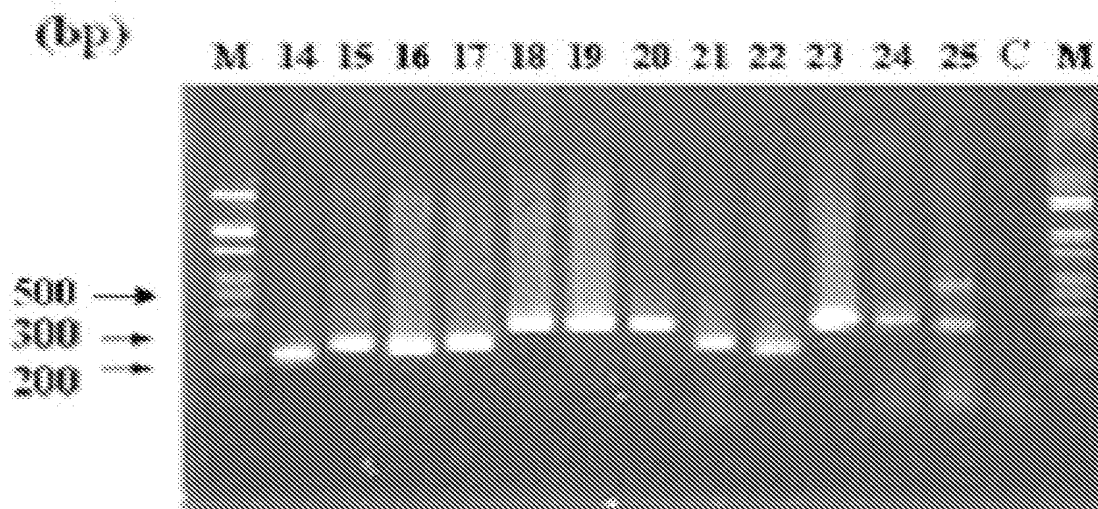


FIG. 4

MP-C [7]	<i>M. arginini</i> [28]	<i>M. arthritidis</i> [30]	<i>M. fermentans</i> [33]	<i>M. hominis</i> [38]	<i>M. hyorhinis</i> [41]
<i>M. neurolyticum</i> [49]	<i>M. opalescens</i> [52]	<i>M. orale</i> [58]	<i>M. pirum</i> [61]	<i>M. penetrans</i> [69]	<i>M. pulmonis</i> [75]
<i>M. salivarium</i> [83]	<i>M. cloacale</i> [85]	<i>M. felonis</i> [87]	<i>M. faucium</i> [30]	<i>M. hyosynoviae</i> [90]	<i>M. muris</i> [92]
<i>M. primatum</i> [96]	<i>M. spermatophilum</i> [100]	<i>M. synoviae</i> [105]	<i>M. pneumoniae</i> [110]	<i>M. genitalium</i> [114]	<i>M. bovis</i> [120]
<i>U. urealyticum</i> [122]			AP-C [22]	<i>A. laidlawii</i> [128]	MP-C [7]

*[] corresponds to SEQ ID No's of Tables 2 and 3.

